

NOTF: PAINT ALL EXPOSED METAL PARTS WITH ONE COAT OF ZINC RICH PAINT AND TWO COATS OF ALUMINUM PAINT IN ACCORDANCE WITH SECTION 710 OF THE STANDARD SPECIFICATIONS.

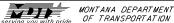
DETAILED	DRAWING	
REFERENCE	DWG.	NO.

REFERENCE STANDARD SPEC. SECTION 604

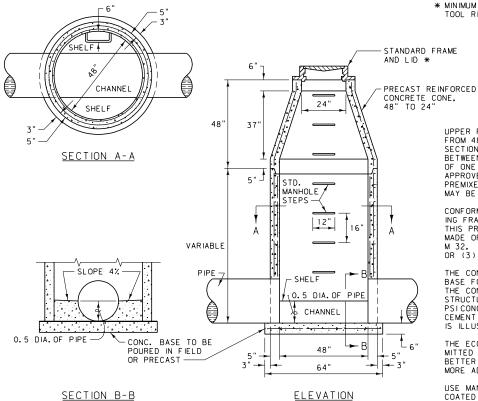
604-00

MEDIAN INLET COVER

EFFECTIVE: FEBRUARY 2005



* MINIMUM WEIGHT FOR FRAME AND LID IS 400 LB. TOOL RING AND COVER TO A MACHINE FIT.



TYPE 1 MANHOLE

UPPER PART IS A CONE TO REDUCE DIAMETER FROM 48" TO 24". CUT BOTTOM OF LOWER SECTION SQUARE TO FIT BASE. GROUT JOINT BETWEEN BASE AND WALL. A GROUT CONSISTING OF ONE PART PORTLAND CEMENT AND TWO PARTS APPROVED SAND MAYBE USED; AN APPROVED PREMIXED GROUT, AVAILABLE COMMERCIALLY, MAY BE USED.

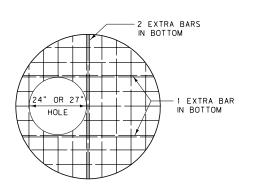
CONFORM ALL MANHOLE CONSTRUCTION, EXCEPTING FRAME, LID, AND BASE, TO AASHTO M 199. THIS PROVIDES THAT REINFORCEMENT MAY BE MADE OF (1) COLD DRAWN STEEL WIRE- AASHTO M 32, (2) STEEL WIRE FABRIC- AASHTO M 55, OR (3) STEEL BARS- AASHTO M 31.

THE CONSTRUCTION AND REINFORCEMENT OF THE BASE FOR EACH TYPE MUST BE COMPATIBLE WITH THE CONDITIONS AND THE WEIGHT OF THE SUPERSTRUCTURE. AASHTO M 199 PROVIDES FOR 4000 PSI CONCRETE. THE MIX CALLS FOR 6 SACKS OF CEMENT PER CUBIC YARD. REINFORCEMENT SHOWN IS ILLUSTRATIVE ONLY. SEE AASHTO M 199.

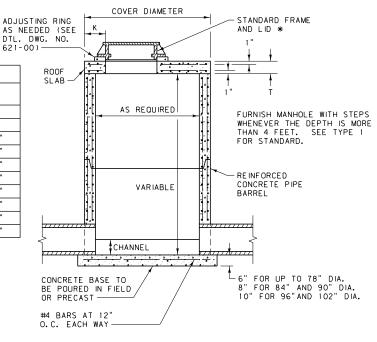
THE ECCENTRIC CONE TRANSITION WILL BE PERMITTED WHEN ITS USE WILL BE AS GOOD OR BETTER THAN THE ONES SHOWN, OR IF IT IS MORE ADAPTABLE TO EXISTING CONDITIONS.

USE MANHOLE STEPS THAT ARE METALLIC AND COATED WITH COPOLYMER POLYPROPYLENE, OR AN APPROVED EQUAL. THE MINIMUM DESIGN LIVE LOAD FOR A SINGLE CONCENTRATED LOAD IS 300 POUNDS.

TYPE 3 MANHOLE ROOF SLAB					
PIPE DIA.	SLAB DIA.	Т	К	BOTTOM BARS	TOP BARS
48"	58"	6"	6"	#4 AT 6"	~
54"	65"	8"	6"	#4 AT 6"	~
60"	72"	8"	7"	#4 AT 6"	#3 AT 6"
66"	79"	8"	7"	#4 AT 6"	#3 AT 6"
72"	86"	8"	8"	#4 AT 6"	#3 AT 6"
78"	93"	8"	8"	#4 AT 4"	#4 AT 4"
84"	100"	8"	9"	#4 AT 4"	#4 AT 4"
90"	107"	8"	9"	#4 AT 4"	#4 AT 4"
96"	114"	8"	9"	#5 AT 4"	#4 AT 4"
102"	121"	8"	9"	#5 AT 4"	#4 AT 4"



TYPE 3 MANHOLE ROOF SLAB

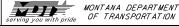


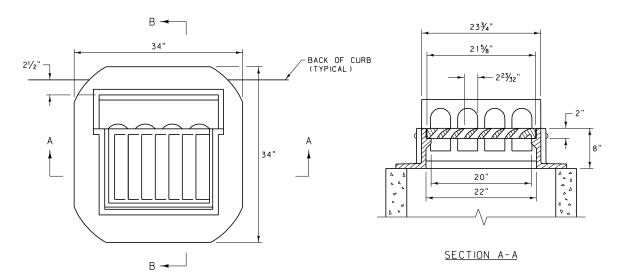
TYPE 3 MANHOLE

DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 604-02

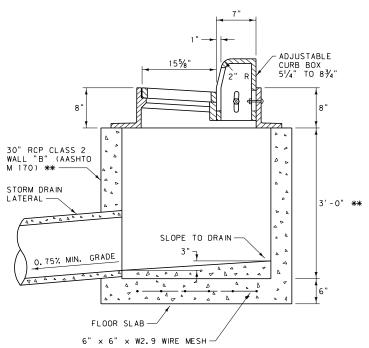
CONCRETE MANHOLE

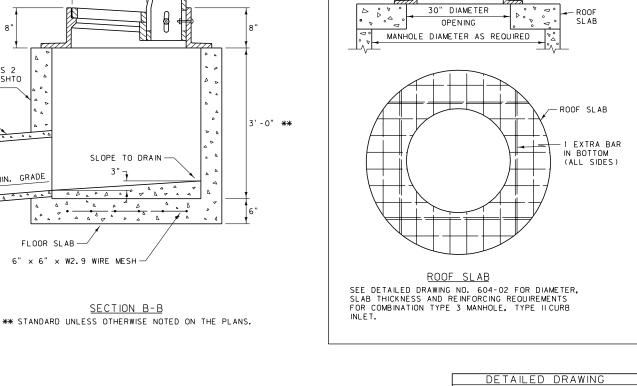
EFFECTIVE: FEBRUARY 2005





<u>PL AN</u> NEENAH FOUNDRY R-3286-8V (JUNE 1992 REVISION) OR APPROVED EQUAL (VANE STYLE)





NOTE: ALL CONCRETE IS CLASS "DD" OR APPROVED EQUAL.

REFERENCE STANDARD SPEC. SECTION 604

COMBINATION

111/2"

30" DIAMETER

← BACK OF CURB

- ROOF

CENTER OF MANHOLE --

TYPE II CURB INLET FRAME & GRATE

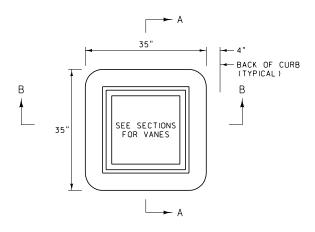
> DWG. NO. 604-03

CURB INLET TYPE II

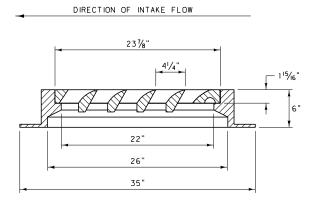
EFFECTIVE: FEBRUARY 2005



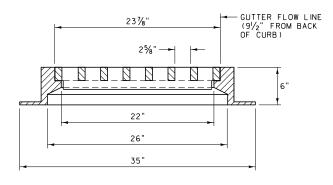
MONTANA DEPARTMENT OF TRANSPORTATION



PLAN
NEENAH CASTING R-3210-L (VANE STYLE) OR APPROVED EOUAL

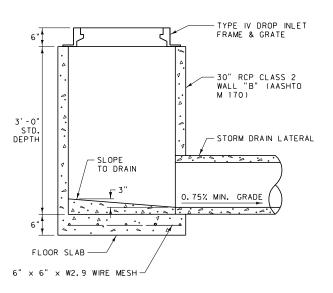


SECTION A-A

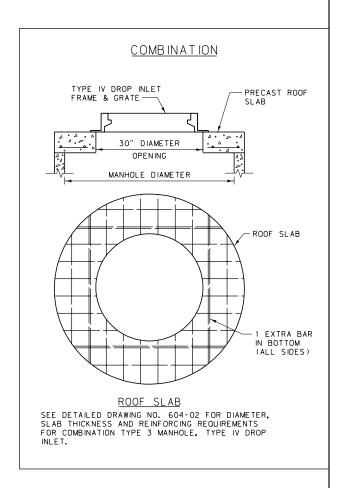


SECTION B-B

NOTE: ALL CONCRETE IS CLASS "DD" OR APPROVED EQUAL.



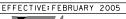
SINGLE DROP INLET
TYPE IV



DETAILED DRAWING

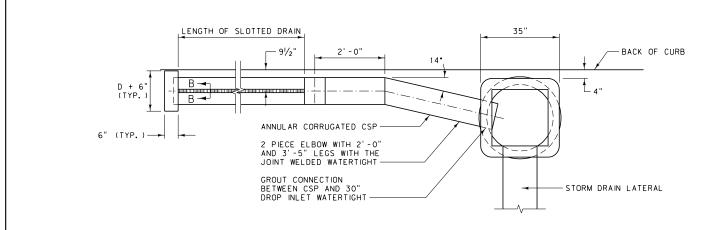
REFERENCE STANDARD SPEC. SECTION 604 DWG. NO. 604-04

DROP INLET

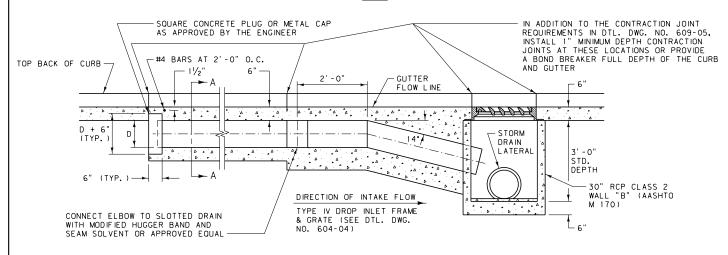




MONTANA DEPARTMENT pride OF TRANSPORTATION



<u>PL AN</u>



ELEVATION

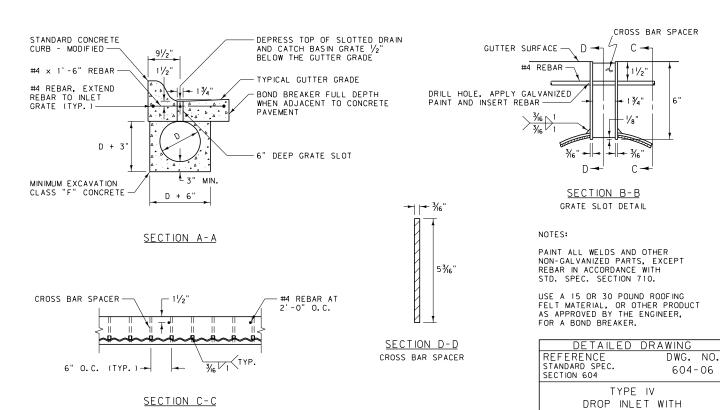
6"

604-06

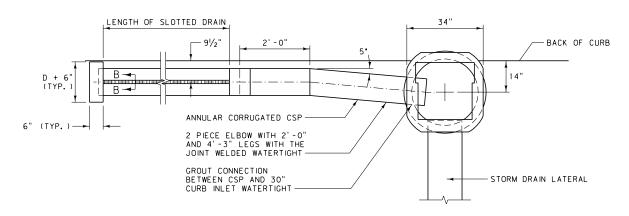
MONTANA DEPARTMENT OF TRANSPORTATION

SLOTTED DRAIN

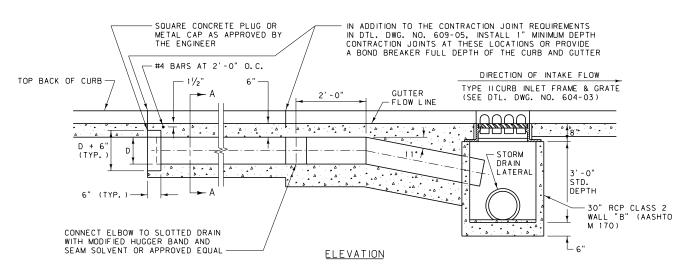
EFFECTIVE: FEBRUARY 2005

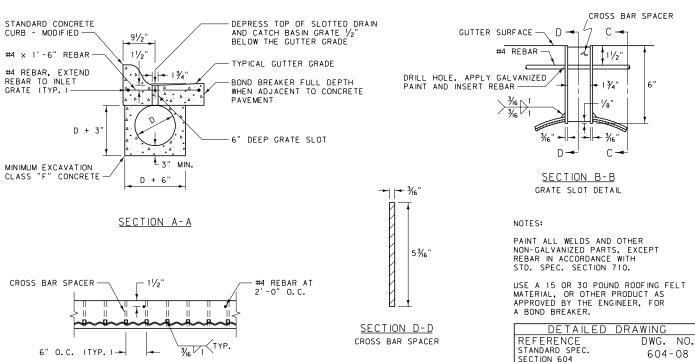


GRATE SLOT WELDING DETAIL



<u>PL AN</u>





SECTION C-C GRATE SLOT WELDING DETAIL 604-08

TYPE II CURB INLET WITH SLOTTED DRAIN

